

**REMARKS**

Claims 18-20 and 22-34 are pending in this application. By this Amendment, claims 18-20 and 22-34 are amended. Support for the amendments to claims 18 and 22 can be found in the specification at, e.g., page 3, lines 20-27. Claims 19, 20 and 23-34 are amended for form. Claim 21 is canceled without prejudice or disclaimer. No new matter is added by the amendments. Reconsideration based on the amendments and final remarks is respectfully requested.

**I. April 3, 2009 Personal Interview**

Applicant appreciates the courtesies shown to Applicant's representative by Examiners Giesy and Young in the April 3, 2009 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

**II. The Claims Comply with 35 U.S.C. §112**

The Office Action rejects claims 18-34 under 35 U.S.C. §112, second paragraph as being indefinite. The rejection is respectfully traversed.

The Office Action asserts that the claims are indefinite because there is no distinction between the claimed limitations and the preamble. Applicant respectfully submits that the claims as amended obviate the rejection. The cancellation of claim 21 renders the rejection of claim 21 moot. Accordingly, withdrawal of the rejection is respectfully requested.

**III. The Claims Define Allowable Subject Matter**

The Office Action rejects claims 18-25 and 28-34 under 35 U.S.C. §102(b) as being anticipated by Vettiger et al. (hereinafter Vettiger - the "Millipede" - more than one thousand tips for future AFM data storage); and rejects claims 26 and 27 under 35 U.S.C. §103(a) as being unpatentable over Vettiger. The rejections are respectfully traversed.

The Office Action asserts that Vettiger teaches all of the currently claimed features of claims 18-20, 22-25 and 28-34, and at least renders obvious all of the features of claims 26

and 27. Specifically, the Office Action asserts that Vettiger teaches, *inter alia*, "the micro-tips being fixed directly on to one and the same support substrate" at page 325 and Figure 1. For reasons discussed during the personal interview, Applicant respectfully disagrees.

Specifically, Vettiger fails to teach or render obvious a micro-tip fixed directly on to one and the same support substrate, as recited in independent claim 18. Vettiger discloses thermal mechanical data recording using a cantilever array, i.e. an array of micro-tips, each born by a corresponding cantilever, which is brought into contact with the polymer layer. This polymer layer is selectively softened by heating the micro-tip while applying a local force by the cantilever/tip to the polymer. Local melting of the polymer thus provides a mark corresponding to a data bit to be recorded. As such, each micro-tip is located at the end of a cantilever. As soon as the micro-tip is brought into contact with the memory support (memory medium), this causes flexing of the cantilever, thus at least partially compensating the height wise dispersion of the micro-tips. A local deformation of the memory medium is obtained thermally in order to absorb data. Accordingly, the Office Action's assertion that Vettiger discloses the micro-tips as claimed, is erroneous. The micro-tips of Vettiger are associated with a substrate, but the main feature of the micro-tip array of Vettiger is that it is a cantilever array, i.e. each micro-tip is connected to the chip via a corresponding cantilever, rather than being fixed directly on to the same support substrate.

As disclosed in the present specification at page 3, paragraphs 1 and 2, one of the aims of the presently claimed combination of features is to overcome the shortcomings of these types of devices, among others.

In view of the foregoing, and as discussed during the personal interview, Applicant respectfully submits that Vettiger fails to teach at least "the micro-tips being fixed directly on to one and the same substrate" as recited in claim 18, and as required by claims depending

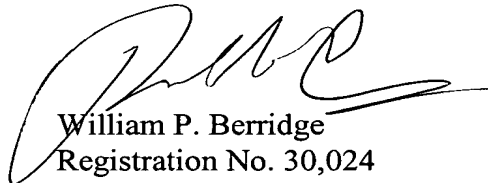
therefrom, in addition to claim 22 and claims depending therefrom. Accordingly, withdrawal of the rejections is respectfully requested.

**IV. Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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WPB:RAC/amt

Attachment:  
Petition for Extension of Time

Date: April 6, 2009

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